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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,293	01/25/2001	Yatin R. Acharya	F0682	3654

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EXAMINER

SALAD, ABDULLAHI ELM I

ART UNIT PAPER NUMBER

2157

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/768,293

Applicant(s)

ACHARYA, YATIN R.

Examiner

Salad E. Abdullahi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response

1. In view of the appeal brief filed on 2/25/2005, PROSECUTION IS HEREBY REOPENED. as set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. In response to applicant's argument determining whether communication pattern exists includes detecting a **predetermined number** of packets having identical source or destination address. Examiner asserts, since a predetermined number can include any number including zero or one and etc, thus detecting the occurrence of a first packet can be established whether a communication pattern exist. Examiner requests the applicant to clarify what the predetermined number encompasses.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 8-11, 14-15 and 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al., U.S. Patent Application Publication No. 2004/0037278[hereinafter Wong], in view of Chaudri et al., U.S. Patent No. 6,275,861[Chaudri].

As to claim 1, and 8 Wyatt discloses a method for establishing a trunk (T3) between first (client device 5) and second network devices (server device 3), comprising:

- receiving via the first network device (10) at least one of a source address and destination address in packets destined for or received from the second network device (server 3)(see fig. 1 and paragraph 0030)
- automatically establishing the trunk (i.e., trunk link T3) between the first network device and second network device (see fig. 1 and paragraphs 0033, 0036 and 0042).

Wyatt is silent regarding: monitoring, whether a communication pattern exists.

Wong discloses a system for identifying a data flow, including monitoring (i.e., data flow identification) whether a communication pattern exists (i.e., .If a specified number of packets are received in a specified period of time having the same source and destination address) (see col. 3, lines 14-20). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate the teaching of Chaudri such as determining based on the monitoring, whether a communication pattern exists into the system of Wong, thus allowing special handling of those packets within that device or by other networking devices in the network.

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As to claims 2-3, and 9, Chaudri discloses the method of claim 1 wherein the determining whether a communication pattern exists includes:
detecting a predetermined number of packets having identical source or destination addresses, wherein the detecting occurs over a predetermined period of time(see col. 3, lines 14-20).

As to claim 4-5, and 10, Wong discloses the method of claim 1 wherein the first network device includes a multi-port switch (10) and the second network device includes a server (see fig. 1 and paragraph 0030)

As to claim 6, and 11, Wong discloses the method of claim 1 wherein automatically establishing the trunk includes:
assigning at least two ports on the first network device to the trunk (see fig. and paragraph 0030-0032)

As per claim 14, Wong discloses substantial features of the claimed invention as discussed above with respect to claims 1 and 8, further reciting: an internal rules checker configured to monitor the received source and destination addresses in the received packets time after the source address goes unseen for a period of time) (see fig. 1 , element 170 and paragraph 0038)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong and Chaudri as applied to claims 1, 8 and 14 discussed above, and further in view of Friedman et al., U.S. patent No. 5,949,788[hereinafter Friedman].

As per claim 7, 13 and 16 Wong and Chaudri discloses substantial features of the claimed invention as discussed above with respect to claim 1, including establishing or selecting a trunk between a first network device and second network device when the communication pattern (i.e., receiving number of packets with same source or destination address for certain period of time), and wherein the trunk consist two or more interfaces depending on the bandwidth requirement [see col. 59-67 and col. 7, lines 2-5].

Wong and Chaudri, are silent regarding:

deactivating the trunk when the communication pattern is determined to no longer exist and reassigning the ports to new trunks if a new pattern is determined.

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Friedman, in analogous art discloses method that permits multipoint trunking among plurality of devices connected by trunking comprising at least two physical links. In addition, Friedman teaches a trunking technique and apparatus that permit the bandwidth of the trunk to be increased in increments through the addition of links to the trunk or deactivating the trunk depending on the bandwidth requirement and reassigning the ports [see col. 10, lines 39-47]. Furthermore, Wong and Chaudri teach creating parallel trunking of interfaces to increase transfer bandwidth between network devices, wherein the number of interfaces that are implemented may be any number greater than two depending on the bandwidth requirement . Hence, deactivating the trunk and reassigning ports to a new trunk would be beneficial to the system of Wong and Chaudri in order to accommodate the bandwidth requirement of more network devices.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate the teaching of Friedman such as deactivating the trunk when the communication pattern is determined to no longer exist and reassigns ports to new trunks if a is new pattern is determined into the system of Wong and Chaudri in order to maximize the bandwidth of the trunk and to assure that the maximum realizable bandwidth is available to the greatest number of connected network devices [see col. 3, line 65 to col. 4, line5).

7. Claims 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong and Chaudri, as applied to claims 11 and 14 discussed above, and further in view of Annaamalai et al., U.S. patent No. 6,445,715[hereinafter Annaamalai].

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As per claim 12, and 18, Wong and Chaudri, disclose substantial features of the claimed invention as discussed above with respect to claim 11, means for associating two or more ports of the first network device with each of at least one trunk [see fig. 6a and 6c and col. 5, lines 47-49 and lines 59-66].

Wong and Chaudri, are silent regarding:

means for associating one or more trunk control bits with each port, the trunk control bits indicating status of a port.

Annaamalai, discloses a system for dynamic control or administration of status of trunks using trunk operational status (TOS) information having a format, wherein the TOS field is 3-bit field whose contents specify the status mode of a port [see col. 8, lines 15-23].

Furthermore, associating one or more trunk control bits to indicate the status of trunk ports would be advantageous to the system of Wong and Chaudri, in order to indicate present operational trunk status of the port. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to associate one or more trunk control bits with each port, where the trunk control bits indicate the status of the port, because it is desirable to specify current operational trunk status of the port to show whether a port is in use, failed or active in order to respond port initiation request.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Salad E. Abdullahi whose telephone number is 571-272-

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4009. The examiner can normally be reached on 8:30 - 5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Abdullahi Salad
Examiner AU 2157
5/10/2005